

ABSTRACT OF THE DISCLOSURE

This invention provides a method and apparatus for issuing or renewing a host address. The apparatus has an input device to receive a data packet having a host identifier, a memory to store a list of host identifiers, and a processor to match the host identifier with the list of host identifiers. If a match is found, an output device transmits the data packet to an address allocation device to issue or renew the host address. The method provides for retrieving the host identifier in the header of the data packet, matching the host identifier with a list of host identifiers, and maintaining a state of authentication for the host if a match is found, otherwise maintaining a state of unauthentication for the host. The method further provides for inserting a proxy address in a relay agent address field, setting a flag, and transmitting the data packet to an address allocation device to issue or renew the host address. The proxy address is also set in a server identifier address field and the flag is unflagged before any data packets are forwarded to the host.

15